

MVS Automated Tape Library

RFP 2000-25

1. **Reference:** Cover Letter and Section 1.5, pg 7
Comment: Cover letter states vendor should submit (1) original and (4) copies of the RFP. Section 1.5, pg 7 of RFP states (1) original and (7) copies of the RFP are to be submitted.
Question: Please clarify?

Answer: One (1) Original and four (4) copies should be provided

2. **Reference:** Section 1.27 Site Visits
Question: Please define and provide closing date of the RFP.

Answer: The Closing Date (Due Date) of the RFP is May 10, 2001 as set by Amendment # 2

3. **Reference:** Section 1.21 Cost Information (paragraph # 2)
Question: Please define acronym "IFA".

Answer: "IFA" stands for "Industry Funding Adjustment" which does not apply to this solicitation.

4. **Reference:** Section 4.4 High Capacity Tape Units (section a)
Question: Are all of the tape drives to be physically attached to the automated tape library?

Answer: Yes, all High-Capacity drives will be connected to the ATL.

5. **Reference:** Section 4.6 Cartridges (section a)
Question: Does DIT require 36 track media?

Answer: No, Section 4.6 refers to High-capacity drives.

6. **Reference:** Section 4.7.b
Comment: This section requests a minimum of 640 GB of DASD for VTS cache.
Question: How was the 640 GB determined? Is this minimum absolutely required or may the responder suggest a smaller cache to save acquisition costs?

Answer: Where there is a minimum stated the vendor needs to supply either the minimum or the amount shown by their model, whichever is greater. The 640 GB size is based on analyses of SMF

and TMC (CA-1) data. Note that this is *effective capacity*, taking compression into account. The physical size would be smaller.

7. Reference: Section 4.14 Incentives

Question: Would the Commonwealth consider other/alternative remedies?

Answer: Others, in addition to that stated, would be considered.

8. Reference: Section 4.15 Trade In

Question: Please provide actual cartridge slot count of current Sutmyn ATL.

Answer: The current Sutmyn ATL contains, as nearly as we can determine, 29,232 usable storage cells, 77 enter cells, 2 exit cells, 1,437 DEE cells, 628 disabled cells (above DEEs), 96 tape unit cells, 48 cleaning volume cells, 30 CE cells, 16 reserved cells, and 12 system cells.

9. Reference: Installation and Delivery, Page 24, Section 4.10

Comment: States "The Vendor shall begin delivery within 20 days of award."

Question: What is the award date for this RFP?

Answer: The date of award would be the date the contract is signed with the vendor. That date has not yet been established.

10. Reference: Page 27, Section 4.14 Incentives and Page 57, Section 9, MANDATORY CONTRACTUAL TERMS AND CONDITIONS, Paragraph 51, REQUIRED PERFORMANCE LEVEL AFTER ACCEPTANCE.

Comment: The above provisions provide that the vendor is required to add at least one month of maintenance/warranty service at no cost to DIT, if the vendor fails to meet the availability or performance level requirements established in this RFP.

Question: The wording of the mandatory availability requirement would prevent *my firm* from responding to this RFP. Will the Commonwealth agree to negotiate the exact wording and calculation of the 99.7% availability and/or the stated remedy?

Answer: The provision remains as is.

11. Reference:

- a. **Page 25, Section 4.11 Warranty/Maintenance**
- b. **Page 56, Section 9. MANDATORY CONTRACTUAL TERMS AND CONDITIONS, Paragraph 47. WARRANTY-PERFORMANCE BASED**
- c. **Page 58, Section 9. MANDATORY CONTRACTUAL TERMS AND CONDITIONS, Paragraph 54. ON-SITE MAINTENANCE OF EQUIPMENT**

- d. **Page 58, Section 9. MANDATORY CONTRACTUAL TERMS AND CONDITIONS, Paragraph 55. PRINCIPAL PERIOD OF WARRANTY/MAINTENANCE**
- e. **Page 59, Section 9. MANDATORY CONTRACTUAL TERMS AND CONDITIONS, Paragraph 57. TERM OF WARRANTY/MAINTENANCE**

Question:

- 1. It is unclear how the Commonwealth uses the terms “warranty” and “maintenance” in the above provisions. Are these terms being used interchangeably? If not, please clarify the difference between “maintenance” and “warranty” in the above provisions.

Answer: The terms are interchangeable.

- 2. Please define “warranty” as used in the above provisions? Please define “maintenance” as used in the above provision?.

Answer: See above answer.

- 3. Please clarify the Commonwealth’s requested pricing method for warranty/maintenance service? If maintenance and warranty service are priced differently, please explain in detail the different pricing method.

Answer: See above answer.

12. Reference: Page 59, Section 9, MANDATORY CONTRACTUAL TERMS AND CONDITIONS Paragraph 60. TERM OF LICENSE

Question: Paragraph 60 provides that all licenses granted under this agreement are irrevocable perpetual licenses. This Vendor understands that paragraph 60 is a mandatory term and any modifications to this paragraph will be treated as non-responsive. However, this vendor does not license its software on a perpetual basis. This Vendor charges an initial license charge with subsequent monthly licensing fees for use of This Vendor’s software. Upon termination or failure to pay the monthly licensing fee, the customer’s license to use the software is terminated and the customer is required to return the software. Will the Commonwealth agree to this Vendor’s software licensing method?

Answer: The provision remains as is.

13. Section 1.18 indicates that 'At least one of the proposals must be complete and must comply with all instructions of this RFP.

1) Does this mean that all other proposal submissions by the same vendor need not comply with Section 4?

Answer: No this means that the vendor does not need to supply parts of the original proposal that would be duplicative (ie. Literature, references, etc)

2) If additional proposal submissions need not comply with Section 4, will non-compliance penalize the vendor, or will the additional proposal(s) be considered modifiers to the original and thus be acceptable?

Answer: “Additional Proposals”, by definition, must be compliant with all mandatory requirements. Proposals not compliant with the mandatory requirements (“Alternate Proposals”), will not be considered in the context of this solicitation. Should the Commonwealth decide to reject all proposals, Alternate proposals might be used in the consideration of modified requirements for a new procurement.

3) If an additional proposal is submitted by a vendor, can modified cost information be submitted?

Answer: Yes, we assume additional proposals would have different prices.

14. Section 4, also states: 'The actual quantities and solution is to be determined by the vendor by modeling the DIT tape environment. Parameters or ground rules stated herein are considered minimums.', and

Section 4.2a states: 'The workload model, outlined in Appendix D, shall be utilized by the vendor to configure the vendor's hardware and software response to this proposal.'

Workload analysis contradicts some of the minimums specified in Section 4.

Answer: Where there is a minimum stated the vendor needs to supply either the minimum or the amount shown by their model, whichever is greater.

15. Section 4 appears to have been written to a specific hardware solution.

Answer: That is not DIT's intent. If it precludes a viable solution, please point out the specific requirements.

16. How did DIT derive the minimum numbers specified in Section 4? Specifically,

Section 4.3 pertaining to cartridge storage capacity.
Section 4.4 pertaining to the number of high capacity tape units
Section 4.5 pertaining to the number of standalone tape units

Answer: The cartridge storage capacity specified in 4.3 and the number of high capacity tape units specified in 4.4 are based on analyses of SMF and TMC (CA-1) data. The number of standalone tape units specified in 4.5 is based on a simulation using SMF data

17. What is DIT requesting being proposed, the results based on the workload analysis or compliance with the minimums?

Answer: Both

18. What is the actual logical use of the high capacity and standalone tape units? Surmising how the tapes will be written/optimized negates information derived from the workload analysis and what a vendor may propose for a specific purpose.

Answer: As stated in Appendix D-1, section e, Method 1, the standalone 36-track tape drives will, as a general rule, be used for datasets that go offsite and are too small to take advantage of high-capacity tape. The description of Method 2, item 6, specifies that this means offsite datasets currently going to 36-track tape and having less than 2.0 volumes per set (average set size by generic dataset name). Similarly, the high-capacity tape drives will, as a general rule, be used for virtual tape destaging, as well as for datasets that are too large for virtual tape, or that go offsite and are large enough to take advantage of high-capacity tape, specifically offsite datasets currently going to 36-track tape and having 2.0 or more volumes per set and non-offsite datasets with 4.0 or more volumes per set (average set size by generic dataset name).

19. Please provide channel details for tape devices. Serial, ESCON, ESCON Directors, overall details....a topographic map would be extremely helpful.

Answer: The following is a summary of the ESCON channel path and ESCON director (ESCD) port capacity, usage, and unused availability for DIT's IBM-compatible mainframe technology environment. All ESCON channel paths connected to tape and DASD device controller channel adapters are dynamically switched via two InRange ESCDs. The channel path quantities that are designated either available or in use by DIT's present six 3490 controllers can be used for connecting standalone 3490E tape drives, high capacity tape drives in an ATL, and replacement VTS (presently a total of 29 CHPs on the SKY-425 and 35 CHPs on the GS795). ESCD port quantities for tape hardware

that are designated available can be used for connecting standalone 3490E tape drives, high capacity tape drives in an ATL, replacement VTS, and any required additional channel paths for new tape hardware (presently a total of 52 ESCD ports for tape hardware).

HDS Skyline 425:

- 72 ESCON channels total
- 19 ESCON channels allocated to tape hardware
 - 12 channels in use by six 3490 controllers
 - 2 channels in use by ATL
 - 2 channels in use by VTS
 - 3 channels in use by 3480's & 3420's
- 16 ESCON channels allocated to communications hardware
 - 4 channels in use by CTC connections
 - 4 channels in use by two 3745/46 FEP's
 - 2 channels in use by two CIP cards
 - 6 channels in use by TCU's
- 20 ESCON channels allocated to DASD hardware
 - 4 channels in use by Platinum/400
 - 4 channels in use by Spectris #1
 - 4 channels in use by Spectris #2
 - 4 channels in use by Spectris #3
 - 4 channels in use by Freedom 7700E
- 17 ESCON channels available

Amdahl GS795

- 96 ESCON channels total
- 20 ESCON channels allocated to tape hardware
 - 12 channels in use by six 3490 controllers
 - 2 channels in use by ATL
 - 2 channels in use by VTS
 - 4 channels in use by 3480's & 3420's
- 19 ESCON channels allocated to communications hardware
 - 4 channels in use by CTC connections
 - 4 channels in use by two 3745/46 FEP's
 - 2 channels in use by two CIP cards
 - 8 channels in use by TCU's
 - 1 channel in use by MIS Barr Channel-in Adapter
- 30 ESCON channels allocated to DASD hardware
 - 6 channels in use by Platinum/400
 - 6 channels in use by Spectris #1
 - 6 channels in use by Spectris #2
 - 6 channels in use by Spectris #3
 - 6 channels in use by Freedom 7700E

- 4 ESCON channels allocated to Laser & Impact printers
- 23 ESCON channels available

Inrange CD/9000 ESCON Directors (two directors, each with 256 port capacity)

- 64 ports allocated to tape hardware (on each CD/9000)
 - 24 ports in use by six 3490 controllers (on each CD/9000)
 - 4 ports in use by ATL (on each CD/9000)
 - 3 ports in use by VTS (on each CD/9000)
 - 8 ports in use by 3480's & 3420's on ESCD#1; 6 ports in use on ESCD#2
 - 25 tape ports available on ESCD#1; 27 tape ports available on ESCD#2
- 56 ports allocated to communications hardware (on each CD/9000)
 - 4 ports in use by CTC connections (on each CD/9000)
 - 6 ports in use by two 3745/46 FEP's (on each CD/9000)
 - 3 ports in use by two CIP cards (on each CD/9000)
 - 14 ports in use by TCU's (on each CD/9000)
 - 2 ports in use by MIS Barr Channel-in Adapter on ESCD#1
 - 27 communication ports available on ESCD#1; 29 communication ports available on ESCD#2
- 112 ports allotted for DASD hardware (on each CD/9000)
 - 10 ports in use by Platinum/400 (on each CD/9000)
 - 10 ports in use by Spectris #1 (on each CD/9000)
 - 10 ports in use by Spectris #2 (on each CD/9000)
 - 10 ports in use by Spectris #3 (on each CD/9000)
 - 10 ports in use by Freedom 7700E (on each CD/9000)
 - 62 DASD ports available on each CD/9000
- 24 additional ports can be added to each CD/9000
 - 8 ports can be added to the communications section of each CD/9000
 - 16 ports can be added to the DASD section of each CD/9000

20. Please provide memory breakdown by LPAR (Conventional, expanded, unused...).

Answer: LPAR 1: 1,132 MB central storage, 1,024 MB expanded storage; LPAR 2: 1,048 MB central, 896 expanded; LPAR 3: 192 MB central, 192 expanded; LPAR 4: 128 MB central, 128 MB expanded; LPAR 5: 128 MB central, 128 expanded; LPAR 6: 384 MB central, 384 MB expanded. During peak periods, there is no unused memory in this storage. There is also 1,940 MB of offline storage on the Amdahl GS795 (LPARs 1, 5, and 6) and 1,000 MB of offline storage on the HDS Skyline 425 (LPARs 2, 3, and 4); but these reserves exist to back expected demand increases from customer applications.

21. When we looks at the tape activity on DIT's Sutmyn VTL (addresses 0C70-0C8F), we see 37,030 mounts but almost no data transfer. Here is the information below:

Workload -> GLOBAL INFORMATION	AI1	CURRVTS	CURR3490
Total Specific Mounts	56709	16833	37117
Total Scratch Mounts	99754	20197	77732
Total Mounts	156463	37030	114849
Total GB Read	32835	12	32750
Total GB Written	59629	0	59582
Total GB	92464	12	92332

We are also seeing only a small amount of mounts and data transfer under program name VLMANC99 which, in our previous experience with the SMF data, was the Sutmyn program that stacked data. The vendors need to understand this in order to best size and configure a automated tape library for the DIT environment. In addition, without this information being appropriately provided and defined, it makes the requirements of the bid extremely risky for any vendor to propose a workable tape system.

Possibilities:

22. DIT may be doing a lot of mounts to the VTL but not transferring any data. Is this what is happening?

Answer: DIT's current Sutmyn VTL is being used in a very restricted manner. No destaging (stacking) is being done. Eligibility for virtual tape is restricted so that all virtual tape datasets can reside in VTL cache until they expire. With some exceptions, only very small datasets are written to virtual tape. The only movement of virtual tape datasets to physical tape would be to remove an exceptionally large dataset from cache, or to allow a dataset to be sent offsite. Of course, we do not intend to continue using virtual tape in this restricted manner with the VTS being procured by this RFP

23. The Sutmyn VTL is not reporting data transfers (in the type 21 record) under the virtual addresses but instead may or may not be showing the data transfer under the actual real tape drive where the data was eventually written. If this is so, does DIT know a way to identify what is the writing of stacked data by the VTL versus the actual real 3490 mounts and data transfers within the Sutmyn ATL?

Answer: See previous answer. No destaging (stacking) is being done by the current Sutmyn VTL.

24. In section 4.1. f, All proposed items (excluding the 3490E standalone units and associated controllers) must be in current production and remain so for first six months of the contract. If replaced in that time period, the vendor must offer DIT an upgrade to the replacement technology at no additional cost.

Since vendors do not have control over the date the contract might be signed, we request that this requirement be removed from the bid or that the Commonwealth tie the six months to the submission/closing of the bid.

Answer: **See Amendment #3.**

25. In section 4.7.h, the RFP states "If the vendor's model shows that memory or channels must be upgraded in order to support their solution....., then the vendor is responsible for including the necessary upgrades in their proposal."

The bid states the number of ESCON channels installed on the two processors, but doesn't state how many are available for the new tape solution. Please provide the available ESCON channels available on both the AMDAHL and HDS processors for attachment of the tape library.

Answer: **Please see the answer to question 19.**

26. In section 4.13 a.2. the bid states " Ninety-five percent of virtual tape read hits and write hits must be satisfied within 1 second, measured over a "shift"."

A one second response time is not industry achievable number for any virtual tape system available on the market. We request that this requirement be changed to a 3-4 second response time.

Answer: **See Amendment #3.**

As defined in Appendix C of the RFP, 4.13.a.2 and 4.13.a.3 refer to virtual tape mounts. A read hit is a virtual tape mount that is satisfied from the cache, without a recall. A write hit is a virtual tape scratch output mount, or a virtual tape specific output mount that is satisfied from the cache, without a recall. GartnerGroup recommends ("FAQ: Virtual-Tape Service-Level Agreements", May 17, 2000) a requirement that 95% of all specific mounts be satisfied with one second (or less) when the data is in the VTS cache. Here, "specific mounts" would include all read hits and all write hits except scratch mounts. The only obvious arguments against requirement 4.13.a.2 would appear to be either (1) that GartnerGroup's recommendation is completely unrealistic, or (2) that virtual tape scratch mounts (which would be expected to be the great majority of mounts addressed by 4.13.a.2) should be expected to take much longer than read hits and specific write hits. Nevertheless, there does not seem to be much practical difference between a one-second mount time and a three-second mount time. Therefore, requirement 4.13.a.2 is changed by replacing "within 1 second" to "within 3 seconds".

27. The bid also does not state what percent of the virtual tape mounts must be read hits, which is a typical spec in designing a VTS solution. Typical performance measurements of a VTS system are what percent of the total mounts are satisfied in cache (hit rate) and the average response time of all mounts to the virtual tape system (both hits and misses). We request that the requirements be amended to reflect industry standard performance requirements since the Commonwealth has such strict terms and conditions and associated penalties if the proposed systems do not meet the Commonwealth's performance requirements.

Answer: See Amendment #3.

Add requirement 4.13.a.5, as follows: “Ninety-five (95) percent of specific mounts must be satisfied from cache, measured over a ‘shift’. The counts of specific mounts that are hits (satisfied from cache) and those that are misses (not satisfied from cache) will be determined from tape mount monitor records.”

Together with 4.13.a.2 (as modified) and 4.13.a.3, this added requirement should meet the intent of the question.

28. In section 4.14, this Incentive stated in the bid has no time limit, nor does it define precisely how the availability will be measured. We request that this requirement be removed from the bid or amended to allow for mutually acceptable criteria to measure over a defined period of time.

Answer: Section 4.9 defines the time period for measurement.

29. In section 4.15 the bid asks for us to offer a trade-in of the Sutmyn hardware. In order to respond with a value, we request that a complete Machine configuration with machine type/model/feature codes be provided.

Answer:

<u>Product</u>	<u>Qty</u>	<u>Description</u>
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Sutmyn Scimitar VTS

2001-D02	1	Virtual Tape Server & Software
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Sutmyn ATL

5600-136B	1	Automated Tape Library
9361-001	4	ESCON Channel
9350-DRM	24	Drum (1,218 Cartridge Capacity)
9351-DDL	2	Drum w/DEE (1,197 Cartridge Capacity)
9349-DAU	13	Drum Attachment
9353-PDU	2	Power Distribution Unit
5498-ML4	12	36 Track Quad Tape Transport
5499-N2	6	Dual Drive Director 36/18 Track

30. Under Section 47. Warranty-Performance Based the Commonwealth states " The Contractor is required to provide a 36 month On-Site Warranty for the System (System = all components, including software and firmware, and hardware, that when installed function as a complete System)." Software is warranted as long as Program Services are available. *We* requests that this is changed to reflect what we believe to some sort of support requirement. Even still, this system runs under IBM's OS/390 which no vendor can warrant except IBM. Typically, IBM does not support any one level/release of the operating system on the mainframes for greater than 18 months. Please remove this requirement or reword to reflect the Commonwealth's intent.

Answer: The warranty pertains to proposed hardware and software. The subject provision remains as is.

31. Under Section 57 Term of Warranty/Maintenance the Commonwealth has a requirement for the pricing increases to be tied to the CPI-W index. Since maintenance is a reflection of the cost of parts and their availability within the industry as well as the cost of transportation of the service personnel and their services, *we* requests that this term be eliminated or modified to reflect a not-to exceed price.

Answer: The provision remains as is.

32. In addition, we believe that there is a typographical error. The last sentence of the paragraph reads "If maintenance prices remain the same of decrease for succeeding years, the State shall be afforded the opportunity to renew the maintenance services at the lowest price available to any other customer." Did DIT mean to use the word "or" instead of "of." As it relates to the last sentence, we request that the Commonwealth remove the requirement for the lowest price available to any other customer for maintenance services. Pricing for maintenance is usually based upon the mix of equipment and type of equipment. We request that the requirement be modified to reflect pricing which is provided to similar customer environments.

Answer: Typographical error. The word "of" should be "or".

33. Under Section 60. Term of License
We request that the Commonwealth remove the reference to perpetual license. Industry standard practices do not license software for an indefinite length of time without some support costs or maintenance costs associated.

Answer: See Amendment #3.

34. Under Section 65. Software Warranty, the Commonwealth requires the " Contractor warrant(s) the operation of the Software Product identified in this Agreement for a minimum of thirty-six (36) months after Product acceptance." We request that this warranty be amended to reflect 12 months for money back guarantee. As stated above,

the operating system OS/390 is not supported beyond 18 months. During that time period support allows for the correction of errors. Beyond this point, IBM does not under the licensing of the mainframe software for S/390 machines guarantee correction of errors.

In addition for this same section, please define "provision of enhancements." Does the Commonwealth mean new versions including to the operating system software?

Answer: See Question 30. The provision remains as is.

35. Under Section 66. Software Support the Commonwealth has once again tied software support to the CPI with the most favored customer provision. We request that this requirement be removed or modified to reflect a similar customer environment as well as to reflect industry standard software support pricing of something similar to 20% of the cost of the product.

Answer: The provision remains as is.

36. Sections 9. Infringement, page 48 and Section 29 Infringement Action These infringement provisions are inconsistent with those contained in software license agreements common within the industry. To facilitate the participation of commercial software companies, will DIT consider revising these provisions or changing them to non-mandatory?

Answer: DIT does not believe paragraph 29 (Infringement Actions) is inconsistent with the industry.

37. Section 47. Warranty- Performance Based
The mandatory terms state that on-site response is required within two hours of a failure. Does this section apply to software, even though software problems are not resolved on-site, except in very rare instances? Software is typically repaired by such off-site methods as telephone support and the transmission of fixes.

Answer: See Amendment #3.

38. Section 60. Term of License
The mandatory terms state that the perpetual license for software is "irrevocable". Does this mean that DIT can continue to use the software even if it does not pay the contractor, or fails to comply with its obligations for use of the software?

Answer: Irrevocable; that which cannot be revoked. Should DIT make an award under this solicitation, and should the Contractor deliver the components of subject contract, and should the Commonwealth accept the components, and should the Commonwealth pay for the components, then the Commonwealth may use the software in its present form, in perpetuity.

39. Section 62. Software Upgrades

This clause is inconsistent with pricing for software upgrades in the commercial software marketplace. If DIT desires to receive the benefit of future software product upgrades available in the market, please explain the rationale for restricting upgrade pricing to the stated formula.

Answer: DIT does not believe the clause is inconsistent with the industry; the clause merely identifies DIT's rights, at the Contractor's price for upgrades

40. Software 65. Software Warranty

This provision states the software products that fail to operate within contractor's proposal or published specifications will be returned and replaced within 5 days. Does this clause apply should DIT fail to install fixes or other remedies provided by the contractor, or combines the software with products not provided by the contractor? Does the term "non-conforming software" mean that DIT expects software to be error free?

Answer: The clause states in part, "Software Products which fail to operate in accordance with the Contractor's Proposal or published specifications will be returned...". It would be inconsistent for DIT not to install fixes or other remedies provided by the Contractor. If the Contractor's published specifications and or the Contractor's proposal states that the Software Products will work, and they fail to, then the Commonwealth may return the Software.